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**PATENTS**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

application of:	)	
<b>MARTIN et al.</b>	)	Examiner: Unknown
	)	
Serial No: 10/723,350	)	Art Unit: Unknown
	)	
Filed: November 26, 2003	)	
	)	
For: STANNOXY-SUBSTITUTED METALLOCENE CATALYSTS FOR OLEFIN AND ACETYLENE POLYMERIZATION	)	

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:


Applicant hereby voluntarily discloses the items listed on the attached Form PTO/SB/08A and PTO/SB/08B to the Commissioner for Patents. Copies of cited references Nos. 20-27 and 31-48 are enclosed herewith. Pursuant to the USPTO waiver of the requirement under 37 CFR 1.98(a)(2)(i), copies of cited references Nos. 1-19 and 28-30 are not enclosed.

Applicant further reserves the right to establish the patentability of the claimed invention over any of the listed information should they be applied as references, and/or to prove that some of the cited information may not be prior art, and/or to prove that some of the cited information may not be enabling for the teachings they purport to offer. This statement further should not be construed as a representation that an exhaustive search has been made, or that the information cited herewith is material, or that there does not exist information more material to the examination of the present Application. The Examiner is specifically requested not to rely solely on the information submitted herein. On the contrary, the Examiner is requested to conduct an independent and thorough review of the information, and to form independent opinions as to their significance.

It is respectfully requested that the Examiner initial and return copies of the enclosed PTO/SB/08A and PTO/SB/08B and to indicate in the official file wrapper of the above-identified patent application that each item of the cited information has been considered.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to account no. 09-0528.

Date: June 18, 2004

  
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Docket No.:C51757-0310

PTO/SB/08A (08-03) Substitute for Form 1449/PTO		Application Number	10/723,350
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary) Sheet 2 of 3		Filing Date	November 26, 2003
		First Named Inventor	Martin, Joel L.
		Art Unit	Unknown
		Examiner Name	Unknown
		Attorney Docket Number	C51757 0310

## U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	U.S. Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	28	6,531,550	03/11/2003	McDaniel et al.	
	29	20030078353A1	04/24/2003	Percec et al.	
	30	20020173611A1	11/21/2002	Percec et al.	

## FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	31	EP 0838481A1	04/29/1998	Po et al.	
	32	EP 0861853A1	09/02/1998	Masi et al.	
	33	JP 11279189A2	10/12/1999	Mitani et al.	
	34	WO 9960033A1	11/25/1999	McDaniel et al.	
	35	TW 386090	04/01/2000	Tsai et al.	
	36	WO 02077043A1	10/03/2002	Percec et al.	
	37	JP 2002282784A2	10/02/2002	Yamashiro et al.	
	38	JP2002282782A2	10/02/2002	Yamashiro et al.	
	39	EP 0927201B1	04/14/2004	Lee et al.	

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PTO/SB/08B (08-03) Substitute for Form 449/PTO	Application Number	10/723,350
INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use as many sheets as necessary)	Filing Date	November 26, 2003
	First Named Inventor	Martin, Joel L.
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	Examiner Name	Unknown
Sheet 3 of 3	Attorney Docket Number	C51757 0310

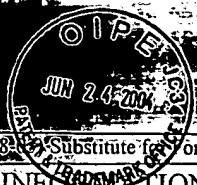
## NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	40	GORSICH, RICHARD D., "Preparation and Properties of Cyclopentadienyltitanium Trichloride," 15th Southwest Regional Meeting of the American Chemical Society, December 3, 1959, pp. 4211-4214, Vol. 82, Baton Rouge, USA
	41	SUZUKI, HIDEO and TAKIGUCHI, TOSHIO, "Preparation and Some Properties of Triorganosiloxy Derivatives of Cyclopentadienyl Titanium", Bulletin Of The Chemical Society Of Japan, 1975, pp. 2460-2461, Vol. 48(9), Japan
	42	DICKSON, R. S. and WEST, B. O., "The Reaction Of Alkali Metal Derivatives Of Group IV Metal Alkyls With Bis(Cyclopentadienyl) Titanium(IV) Dichloride," Australian Journal Of Chemistry, 1961, Vol. 14, pp. 555-561, Melbourne, Australia
	43	NOMURA, KOTOHIRO; NAGA, NAOFUMI; MIKI, MISAO; YANAGI, KAZUNORI; and IMAI, AKIO, "Synthesis Of Various Nonbridged Titanium(IV) Cyclopentadienyl-Aryloxy Complexes Of The Type CpTi(OAr)X <sub>2</sub> And Their Use In The Catalysis Of Alkene Polymerization. Important Roles Of Substituents on Both Aryloxy And Cyclopentadienyl Groups," Organometallics, 1998, pp. 2152-2154, Vol. 17, No. 11, American Chemical Society, USA
	44	KÖPPL, ALEXANDER; ALT, HELMUT G., "Heterogeneous Metallocene Catalysts For Ethylene Polymerization," Journal of Molecular Catalysis A: Chemical, 2001, pp. 23-32, Vol. 165, Elsevier, The Netherlands
	45	KAJIGAESHI, SHOJI; KADOWAKI, TOSHIYA; NISHIDA, AKIKO; and FUJISAKI, SHIZUO, "Selective Preparation of Fluorene Derivatives Using the t-Butyl Function as a Positional Protective Group," Bull. Chem. Soc. Jpn., 1986, pp. 97-103, Vol. 59, The Chemical Society of Japan, Japan
	46	ALT, HELMUT, G.; JUNG, MICHAEL; KEHR, GERALD, "C <sub>1</sub> -verbrückte Fluorenyliden-Indenylidenkomplexe des Typs (C <sub>13</sub> H <sub>8</sub> -CR <sub>2</sub> -C <sub>9</sub> H <sub>6</sub> ,R')ZrCl <sub>2</sub> (n=0, 1; R=Me, Ph, Butenyl; R'=Alkyl, Alkenyl) als Metallocenkatalysatorvorstufen für die Ethylenpolymerisation," Journal of Organometallic Chemistry, 1998, pp. 153-181, Vol. 562, Elsevier, Spain
	47	ALT, HELMUT, G.; JUNG, MICHAEL "C <sub>1</sub> -Bridged Fluorenylidene Cyclopentadienylidene Complexes of the Type (C <sub>13</sub> H <sub>8</sub> -CR <sup>1</sup> R <sup>2</sup> -C <sub>5</sub> H <sub>3</sub> R)ZrCl <sub>2</sub> (R <sup>1</sup> R <sup>2</sup> =alkyl, phenyl, alkenyl; R=H, alkyl, alkenyl, substituted silyl) as Catalyst Precursors for the Polymerization of Ethylene and Propylene," Journal of Organometallic Chemistry, 1998, pp. 87-112, Vol. 568, Elsevier, Spain
	48 (Abstract Only)	BABITSKII, B. D.; GOLENKO, T. G.; DOLGOPLOSK, B. A.; KORMER, V. A.; SKOBLIKOVA, V. I.; TINYAKOVA, E. I., "Stereospecific Polymerization of Butadiene in the Presence of Catalyst Systems Based on π-cyclopentadienyl Complexes of Nickel," Doklady Akademii Nauk SSSR, 1965, pp. 836-838, Vol. 161(4), S.V. Lebedev All-Union Synth. Rubber Res. Inst., Leningrad, Russia

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Sheet 1 of 3

PTO/SB 03A (03-12) Substitute for Form 1449/PTO

Application Number 10/723,350

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

Filing Date November 26, 2003

First Named Inventor Martin, Joel L.

Art Unit Unknown

Examiner Name Unknown

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(Use as many sheets as necessary)

Sheet 1 of 3

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Examiner Initials	Cite No.	U.S. Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	3,334,119	08/01/1967	Cohen	
	2	3,431,288	03/04/1969	Gibbons et al.	
	3	3,541,215	11/17/1970	DeMarco et al.	
	4	3,952,105	04/20/1976	Dorschner	
	5	5,258,475	11/02/1993	Kissin	
	6	5,326,837	07/05/1994	Kissin	
	7	5,631,335	05/20/1997	Alt et al.	
	8	5,637,744	06/10/1997	Alt et al.	
	9	5,726,134	03/10/1998	Adams	
	10	5,726,332	03/10/1998	Eisch et al.	
	11	5,906,955	05/25/1999	Hamura et al.	
	12	5,919,983	07/06/1999	Rosen et al.	
	13	5,942,459	08/24/1999	Sugano et al.	
	14	6,034,187	03/07/2000	Maehama et al.	
	15	6,037,442	03/14/2000	Proulx et al.	
	16	6,069,109	05/30/2000	Kao et al.	
	17	6,107,230	08/22/2000	McDaniel et al.	
	18	6,165,929	01/26/2000	McDaniel et al.	
	19	6,340,652	01/22/2002	Sugano et al.	

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Examiner Initials	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	20	DE 1105416	04/27/1961	Natta et al.	
	21	BE 635987	02/10/1964	Feay	
	22	SU 300478	04/07/1971	Matkovskii	(Abstract Only)
	23	EP 0683180A2	11/22/1995	Suga et al.	
	24	EP 0741146A1	11/06/1996	Fusco et al.	
	25	EP 0775712A1	05/28/1997	Tsai et al.	
	26	EP 0780405A1	06/25/1997	Po et al.	
	27	EP 0785220A1	07/23/1997	Milani et al.	

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